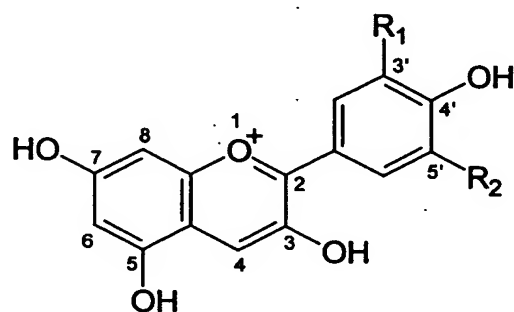


Abstract

The present invention relates to plants of the genus *Raphanus* containing increased levels of anthocyanins. In particular the edible sprouts and turnips of the

5 *Raphanus* plants contain high levels of anthocyanins and thereby provide health-promoting effects. The anthocyanins in the *Raphanus* plants are present at a level of at least 100 nmol per gram of fresh weight and have an absorbance maximum at a wavelength in the range of 515 to 550 nm. The invention also provides methods for growing the *Raphanus* plants as purple sprouts, both in the form of alfalfa-type sprouts

10 as well as in the form of two-leafed plantlets, referred to as cress or micro-vegetables. The invention further provides methods for producing anthocyanins based on growing the *Raphanus* plants and isolating anthocyanins therefrom.



$R_1 = R_2 = H$ : *Pelargonidin*

$R_1 = OH$ ,  $R_2 = H$ : *Cyanidin*

$R_1 = OCH_3$ ,  $R_2 = H$ : *Peonidin*

$R_1 = R_2 = OH$ : *Delphinidin*

$R_1 = OCH_3$ ,  $R_2 = OH$ : *Petunidin*

$R_1 = R_2 = OCH_3$ : *Malvidin*

**Formula 1**